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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/577,014

04/28/2006

Hisashi Sano

127659

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EXAMINER

CHU, RANDOLPH I

ART UNIT

PAPER NUMBER

2624

NOTIFICATION DATE

DELIVERY MODE

03/29/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com
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Office Action Summary	Application No.		Applicant(s)	
	10/577,014		SANO, HISASHI	
	Examiner		Art Unit	
	RANDOLPH CHU		2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/19/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Argument

1. Applicant's arguments filed on 2/25/2010 have been considered and they are persuasive. The finality has been withdrawn.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows (see also MPEP 2106):

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. *O'Reilly*, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101.

... a signal does not fall within one of the four statutory classes of Sec. 101.

... signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101.

Claim(s) 12 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claim 12 is drawn to functional

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descriptive material recorded on a computer-readable storage medium. The specification define recording medium as a magnetic disk (including flexible disks), optical disk (including CD-ROM (compact disk read only memories), DVD (digital versatile disks)), optical magnetic disk (including MD (registered trademark (Mini-Disk))), semiconductor memory or the like. With broadest reasonable interpretation, “or the like” includes *non-statutory* subject matter such as a “signal” or “carrier wave”.

“A transitory, propagating signal ... is not a “process, machine, manufacture, or composition of matter.” Those four categories define the explicit scope and reach of subject matter patentable under 35 U.S.C. § 101; thus, such a signal cannot be patentable subject matter.” (*In re Nuijten*, 84 USPQ2d 1495 (Fed. Cir. 2007)).

Because the full scope of the claim as properly read in light of the disclosure appears to encompass non-statutory subject matter (i.e., because the specification defines/exemplifies a computer readable medium as a non-statutory signal, carrier waver, etc.) the claim as a whole is non-statutory. The examiner suggests amending the claim to include the disclosed non transitory tangible computer readable storage media, while at the same time excluding the transitory intangible transitory media such as signals, carrier waves, etc. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claim(s) 1-9 are rejected under 35 U.S.C. 102(a) as being anticipated by Aoyama et al. (WO 2004/019607) ((US 2009/0046179) is used as translation)).

With respect to claim 1, Aoyama et al. teach a region setting step for carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction (para [0198], Fig. 18B), wherein the above step is performed by a processor (Fig. 1 ref label 10).

With respect to claim 2, Aoyama et al. teach a first setting step for carrying out the partitioning at a default size (uniform split); and second setting step for further

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partitioning first regions set in the first setting step when the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that neither of the straight lines is contained (para. [0197] - [0202]; Fig. 18B).

With respect to claim 3, Aoyama et al. teach a first setting step for carrying out the partitioning at a default size (uniform split); and a second setting step for changing the size of all the first regions set in the first setting step when any of the first regions contain the straight line passing through the origin in the horizontal direction or the straight line passing through the origin in the vertical direction, so that all the first regions do not contain the straight lines (para. [0197] - [0202]; Fig. 18B).

With respect to claim 4, please refer to rejection for claim 1.

With respect to claim 5, please refer to rejection for claim 1.

With respect to claim 6, please refer to rejection for claim 2.

With respect to claim 7, please refer to rejection for claim 3.

With respect to claim 8, please refer to rejection for claim 2.

With respect to claim 9, please refer to rejection for claim 3.

2. Claim(s) 1, 4 and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Hashimoto (US Patent 7,565,044).

With respect to claim 1, Hashimoto teaches a region setting step for carrying out the partitioning so that the regions do not contain a straight line passing through an origin in the horizontal direction and a straight line passing through the origin in the vertical direction (Fig. 6) wherein the above step is performed by a processor (col. 1 lines 6-9).

With respect to claim 4, please refer to rejection for claim 1.

With respect to claim 5, please refer to rejection for claim 1.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RANDOLPH CHU whose telephone number is (571)270-1145. The examiner can normally be reached on Monday to Thursday from 7:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vikkram Bali can be reached on 571-272-7415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

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more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Randolph I Chu/

/VIKKRAM BALI/

Supervisory Patent Examiner, Art Unit 2624